Pending claims:

1. (3X Amended) A method for treating or preventing stroke in a human subject susceptible to intracerebral hemorrhaging, comprising administering to the human subject an effective amount of a CD39 polypeptide comprising consecutive amino acids the sequence of which is set forth in SEQ ID NO:1 or an active polypeptide fragment thereof so as to inhibit adenosine diphosphate-mediated platelet aggregation by increasing adenosine diphosphate catabolism without increasing incidence of intracerebral hemorrhage in the human subject.

2. (4X Amended) The method of claim 1, wherein the active polypeptide fragment of CD39 polypeptide is a truncated form of the CD39 polypeptide.

7. (Amended) The method of claim 1, wherein an active fragment of the CD39 polypeptide comprises consecutive amino acids the sequence of which is identical to the sequence of amino acid residues 20-80 of SEQ ID NO: 1.

9. (2X Amended) The method of claim 1, wherein the administration of the CD39 polypeptide or the active fragment thereof occurs at the onset of stroke in the subject.

10. (2X Amended) The method of claim 1 wherein the administration of the CD39 polypeptide or the active

10. (2X Amended) The method of claim 1 wherein the administration of the CD39 polypeptide or the active fragment thereof is prior to stroke onset in the subject.

11. (2X Amended) The method of claim 1, wherein the administration of the CD39 polypeptide or the active fragment thereof occurs after the onset of stroke in the subject.

12. (Amended) The method of claim 1, wherein the CD39 polypeptide or the active fragment thereof is administered in a dosage of 1-20 mg/kg of the subject's body weight.

13. (Amended) The method of claim 1, wherein the CD39 polypeptide or the active fragment thereof is administered in a dosage of 4-8 mg/kg of the subject's body weight.

17. (5X Amended) A method for testing a compound comprising:

(a) administering a compound, which increases ADP catabolism, to an animal which is a model for the thrombotic or ischemic disorder, before, concurrently with, or after step (b);

(b) inducing the thrombotic or ischemic disorder in the animal;

(c) measuring the stroke outcome and the incidence of intracerebral hemorrhage in the animal;

(d) measuring platelet or fibrin deposition or both in ischemic tissue in the animal; and

(e) comparing the stroke outcome and incidence of intracerebral hemorrhage and the platelet or fibrin deposition in the presence of the compound with the incidence of intracerebral hemorrhage and the platelet or fibrin deposition in the absence of the compound, wherein a decrease in platelet or fibrin deposition and no increase in the incidence of intracerebral hemorrhage indicates that the compound is capable of treating or preventing the thrombotic or ischemic disorder in the subject.

18. The method of claim 17, wherein the animal model comprises CD39-deficient mice and wherein the thrombotic or ischemic disorders are induced by administering an agonist to said mice.

19. (Amended) The method of claim 17, wherein the stroke outcome is measured as platelet deposition, bleeding time and infarction volume.

22. (Amended) The method of claim 17, wherein the administration of the compound is before step (b).

23. The method of claim 17, wherein the administration of the compound is concurrent with step (b).

24. The method of claim 17, wherein the administration of the compound is after step (b).

27. (2X Amended) A method for treating or preventing stroke in a human subject susceptible to intracerebral hemorrhaging, comprising administering to the human subject an effective amount of a deletion mutant, substitution mutant, or insertion mutant of the CD39 polypeptide, which CD39 polypeptide comprises consecutive amino acids having the sequence shown in SEQ ID NO:1, so as to inhibit adenosine diphosphate-mediated platelet aggregation by increasing adenosine diphosphate catabolism without increasing incidence of intracerebral hemorrhage in the human subject.

39. (New) A method for treating or preventing stroke in a human subject susceptible to intracerebral hemorrhaging, comprising administering to the human subject an effective amount of a CD39 polypeptide comprising consecutive amino acids the sequence of which is set forth in SEQ ID NO:2 so as to inhibit adenosine diphosphate-mediated platelet aggregation by increasing adenosine diphosphate catabolism without increasing incidence of intracerebral hemorrhage in the human subject.

40. (New) The method of claim 39, wherein a deletion mutant of the CD39 polypeptide which lacks a transmembrane domain is administered.

41. (New) The method of claim 39, wherein the CD39 polypeptide comprises consecutive amino acid the

sequence of which is identical to the sequence from amino acid number 1 to amino acid number 50 in SEQ ID NO:2.

42. (New) The method of claim 39, wherein the administration of the CD39 polypeptide occurs at the onset of stroke in the subject.

43. (New) The method of claim 39, wherein the administration of the CD39 polypeptide is prior to stroke onset in the subject.

44. (New) The method of claim 39, wherein the administration of the CD39 polypeptide occurs after the onset of stroke in the subject.

45. (New) The method of claim 39, wherein the CD39 polypeptide is administered in a dosage of 1-20 mg/kg of the subject's body weight.

46. (New) The method of claim 39, wherein the CD39 polypeptide is administered in a dosage of 4-8 mg/kg of the subject's body weight.